

ESCAP MEETING NO. 47 - 03/07/01

AGENDA

There was no agenda developed or used for the March 7, 2001 meeting.

ESCAP MEETING NO. 47 - 03/07/01

MINUTES

**Minutes of the Executive Steering Committee on
Accuracy and Coverage Evaluation (A.C.E.) Policy (ESCAP) Meeting # 47**

March 7, 2001

Prepared by: Sarah Brady

The forty-seventh meeting of the Executive Steering Committee on Accuracy and Coverage Evaluation Policy was held on March 7, 2001 at 10:30. The agenda for the meeting was to discuss future decisions regarding adjusted data.

Committee Attendees:

Nancy Potok
Paula Schneider
Cynthia Clark
Nancy Gordon
John Thompson
Jay Waite
Bob Fay
Howard Hogan
Ruth Ann Killion
John Long
Carol Van Horn

Deputy Director/Acting Director:
William Barron

Other Attendees:

Marvin Raines
Bill Bell
Raj Singh
Donna Kostanich
Deborah Fenstermaker
Kathleen Styles
Carolee Bush
Maria Urrutia
Sarah Brady
Annette Quinlan

I. Future Decisions

John Thompson opened the meeting with a discussion of the questions that need to be answered by the Committee to determine the accuracy of the adjusted data. The unresolved issues are as follows:

- Demographic Analysis (DA)-Explain the differences between DA, the census, and A.C.E.
- The role of adjusted data for Federal Funding
- Synthetic Error-How different models of correlation bias affect synthetic error
- Balancing issues between the P and E-Samples.

In order to resolve these issues, several Committee members will research what information can be made available from the A.C.E. evaluations and which of the A.C.E. evaluations can be expedited to assist in the Committee's recommendation process.

John then lead a discussion about future uses of the adjusted data. The results of the A.C.E. may be used for (1) intercensal estimates; (2) survey control counts; and (3) long form weighting controls. The Committee will recommend to the Director of the Census Bureau whether adjusted data would be more accurate for these purposes. Jay Waite and the Decennial Management Division (DMD) will research and devise a time line when the Committee needs to make a decision regarding the use of adjusted data for (1) - (3).

II. Next Meeting

The agenda for the next meeting, scheduled for March 12, 2001, is to review the timing of when the Committee needs to recommend the use of adjusted data for intercensal estimates, survey controls, and long form weighting controls.

ESCAP MEETING NO. 48 - 03/12/01

AGENDA

There was no agenda developed or used for the March 12, 2001 meeting.

ESCAP MEETING NO. 48 - 03/12/01

HANDOUTS

Materials attached to these minutes were draft and preliminary material to inform the ESCAP Committee. The data and analysis contained in these documents are subject to revision and are not final. These materials report the results of research and analysis undertaken by Census Bureau staff. They have undergone a more limited review than official Census Bureau publications. Research results and conclusions expressed are those of the authors and do not necessarily indicate concurrence by the Census Bureau.

ESCAP questions and Planned Evaluations that fully or partially answer the questions.

Questions	Evaluations & Other
1. Level of office processing error in A.C.E.--matching and E-sample coding error.	N14-"Evaluation of Matching Error" answers this question.
2. E-Sample geocoding error--overstating correct enumeration rate.	N16-"Impact of Targeted Extended Search" and N17-"Targeted Extended Search Analysis" partially answer question. T6 gives answers we know already.
3. Within search area census duplication rate.	N14-"Evaluation of Matching Error" might work, but does not address if we did the right thing design wise. Rita Petroni will look to see if more questions can be added to address this concern.
4. EE errors--underestimating Census Fictitious and other coverage errors.	N10-"Falsification in A.C.E." and O14-"Measurement Error Reinterview Analysis" give us our best chance to answer them. Recall bias is issue.
5. P-sample field error-quality of outmover rosters.	O14-"Measurement Error Reinterview Analysis" with some caveat about recall bias.
6. Balancing	Nothing currently planned to answer this. Potentially TE3 and other Bob Fay work.
7. Effect of Late census adds on DSEs.	Nothing currently planned to answer this.
8. Effect of whole person imputation (IIs) on DSE	We have work going on to deliver what happened.
9. Synthetic error--homogeneity in post-strata.	Additional simulation work will be undertaken.
10a. GQ coverage.	E5-"Group Quarters (GQ) Enumeration" and N20-"Group Quarters Analysis" documents possible misclassification; provides some information.
10b. Duplication between HU & GQ populations.	Thompson & Waite currently discussing.
11. Demographic Analysis	John Long
12. Is there some type of conditioning in E-Sample blocks?	

Adjustment Decision: Data Sets and Key Dates

Data Set	Optimal Decision Date	Final Internal Decision Date	Issue Date
100% Data Products (SF-1 Files)	March 10, 2001	March 30, 2001 If no decision by March 30, 2001; would have to begin processing both files in order to meet issue date.	June 1, 2001
Sample Data Products (SF - 3 Files)	December 1, 2001	December 1, 2001 If no decision by December 1, 2001; would have to develop specifications and process both sets of files to meet issue date	June 1, 2002
American Community Survey (C2SS Data)	April 15, 2001	April 15, 2001 If no decision by April 15, 2001; would have to develop specifications and weight samples using both files and develop 2 sets of products to meet issue date	July 1, 2001

Adjustment Decision: Data Sets and Key Dates - Cont.

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Data Set	Optimal Decision Date	Final Internal Decision Date	Issue Date
Intercensal Population Estimates	June 1, 2001 If no decision by June 1, 2001; will have to develop specifications to produce 2 sets of population estimates	October 15, 2001 The FSCPE's review the population estimates before issue. No decision by this date would mean sending 2 sets of files and estimates to the FSCPE for review.	December 26, 2001
Census Sponsored Survey Controls (Including March CPS Supplement)	June 1, 2001 If no decision by June 1, 2001; will have to develop specifications to produce 2 sets of population controls	October 15, 2001 Would need to develop 2 sets of comparisons to alert users about the "bump" to be experienced when the base is changed	December, 2001
CPS Survey Controls (BLS Monthly Survey)	April 15, 2002	April 15, 2002 If no decision by that date, would have to develop 2 sets of comparisons for BLS and work through alternatives with them	December, 2002

Related Issues of Adjustment Decision

1. Adjustment decision should apply to both population and housing detail

Working assumption is that the decision about adjustment applies to both population and housing detail. The dates in the table apply to both population and housing detail. This is necessary as all of the products included in the table include necessary outputs of both population and housing. We currently develop and deliver housing estimates for controls to the American Housing Survey. Estimates of housing units are also used to estimate the population in subcounty areas.

2. Consistency across product should be part of the decision process

The data products outlined in the table are often used together. Funding formulas often require the latest census data on income, poverty, and other sample characteristics together with the latest intercensal population estimate. Can we mix unadjusted and census level in the same formula?

Sponsors often want to develop per capita rates for the variables available out of surveys. To do this, sponsors use the latest intercensal population estimate together with an estimate of the variable from the survey. Can we mix the two if different adjustment decisions apply. This was the case last decade and caused confusion and conflicting per capita results.

Where does the American Community Survey fit? Is it considered a survey and decisions about survey controls apply to the ACS or is it separate? What about consistency between the ACS and CPS? What about consistency between ACS and sample products?

3. Availability of data products from two sources

For internal development, products may need to be developed using both the census level and adjusted data (especially if decision is to adjust any product). If, for example, intercensal estimates are developed using "adjusted data", to do the estimates, we will need to develop the adjusted April 1 population for subcounty areas. In disseminating the population estimates, we include the base April 1 population. Could I disseminate the "adjusted" April 1 population for subcounty areas? What would I call it? Estimated base population?

4. What does having to do two sets of estimates mean?

In the 1990's, we developed the "adjusted survey controls" by adding a constant "adjustment matrix" to the intercensal estimates which were census level. No dual processing was necessary. However, for the 2000 decade, we would opt to develop two sets of estimates - one using the census level as the base and one using the adjusted population as the base. While we do not expect the level of the demographic components to change, we will need to carefully evaluate this assumption before committing to the component levels.

We will need to spend additional resources in the subcounty methodology. The subcounty methodology uses housing unit data together with occupancy rates and person per household values. We will need to carefully evaluate the implied values using the census level as well as the adjusted files.

This means, that we will need to develop two set of estimates and be ready to release either set. This does mean some extra resources – perhaps 1 - 2 extra FTE's. However, the work for a short while would be manageable.

5. Why are there 2 dates for survey controls?

For the Current Population Survey (CPS) and other Census Bureau surveys, the current time frame for shifting from a 1990 base to a 2000 base is January 2003. This date corresponds to a shift in the questionnaire and has been coordinated with BLS. However, because of the large differences between the current 1990 based survey controls and the Census 2000 results, we believe that most survey sponsors will want an earlier shift. However, in case BLS does not want a shift in 2002, we would recommend that other Census Bureau surveys and the March supplement to the CPS shift in 2002 while BLS waits until 2003. While we do not expect BLS to wait until 2003, we show this as an option.

ESCAP MEETING NO. 48 - 03/12/01

MINUTES

**Minutes of the Executive Steering Committee on
Accuracy and Coverage Evaluation (A.C.E.) Policy (ESCAP) Meeting # 48**

March 12, 2001

Prepared by: Sarah Brady

The forty-eighth meeting of the Executive Steering Committee on Accuracy and Coverage Evaluation Policy was held on March 12, 2001 at 12:30. The agenda for the meeting was to discuss what information can be gathered from the evaluations and the timing for making a decision for the use of adjusted data for intercensal estimates, survey controls, and long form weighting controls.

Committee Attendees:

Paula Schneider
Cynthia Clark
John Thompson
Jay Waite
Bob Fay
Howard Hogan
Ruth Ann Killion
Carol Van Horn

Deputy Director/Acting Director:
William Barron

Other Attendees:

Bill Bell
Raj Singh
Donna Kostanich
Deborah Fenstermaker
Kathleen Styles
Carolee Bush
Maria Urrutia
Sarah Brady

I. Time Line for Future Decisions

Carol Van Horn presented information about key dates for the recommendation the Committee will make about the use of adjusted data for intercensal estimates, survey controls, and long form weighting controls. Carol also presented a table with a list of the unresolved issues concerning the A.C.E. and the corresponding evaluations or other data that answer these questions. Carol will continue to research when this information will be available. The Committee can then analyze how this information corresponds with the decision dates. The handouts are attached.

Jay Waite also updated the Committee on the demographic analysis (DA) research. Currently, information is being gathered from Census 2000 that could possibly be used to evaluate the DA assumptions.

II. Next Meeting

The next meeting is scheduled for late March 2001, pending Carol's collection of the timing information for the evaluations. The agenda for the next meeting is to discuss the availability of evaluation results to assist in answering unresolved issues identified by the ESCAP.

ESCAP MEETING NO. 49 - 04/12/01

AGENDA

Kathleen P Porter
04/04/2001 11:18 AM

To: Angela Frazier/DMD/HQ/BOC@BOC, Annette M Quinlan/DMD/HQ/BOC@BOC, Barbara E Hotchkiss/DSD/HQ/BOC@BOC, Betty Ann Saucier/DIR/HQ/BOC@BOC, Carnelle E Sligh/PRED/HQ/BOC@BOC, Carol M Van Horn/DMD/HQ/BOC@BOC, Carolee Bush/DMD/HQ/BOC@BOC, Cynthia Z F Clark/DIR/HQ/BOC@BOC, Howard R Hogan/DSSD/HQ/BOC@BOC, John F Long/POP/HQ/BOC@BOC, John H Thompson/DMD/HQ/BOC@BOC, Linda A Hiner/DSSD/HQ/BOC@BOC, Lois M Kline/POP/HQ/BOC@BOC, Margaret A Applekamp/DIR/HQ/BOC@BOC, Maria E Urrutia/DMD/HQ/BOC@BOC, Marvin D Raines/DIR/HQ/BOC@BOC, Mary A Cochran/DIR/HQ/BOC@BOC, Mary E Williams/DIR/HQ/BOC@BOC, Nancy A Potok/DIR/HQ/BOC@BOC, Nancy M Gordon/DSD/HQ/BOC@BOC, Patricia E Curran/DIR/HQ/BOC@BOC, Paula J Schneider/DIR/HQ/BOC@BOC, Phyllis A Bonnette/DIR/HQ/BOC@BOC, Preston J Waite/DMD/HQ/BOC@BOC, Robert E Fay III/DIR/HQ/BOC@BOC, Ruth Ann Killion/PRED/HQ/BOC@BOC, Sarah E Brady/DMD/HQ/BOC@BOC, Sue A Kent/DMD/HQ/BOC@BOC, Vanessa M Leuthold/DMD/HQ/BOC@BOC, William G Barron Jr/DIR/HQ/BOC@BOC, William R Bell/SRD/HQ/BOC@BOC

cc:

Subject: ESCAP Meeting scheduled for 4/12

Date: April 12 Thursday

Time: 1:30-3:00 p.m.

Room: 2412/3

Subject: Further analysis of A.C.E., Census 2000 and demographic analysis

ESCAP MEETING NO. 49 - 04/12/01

HANDOUTS

Materials attached to these minutes were draft and preliminary material to inform the ESCAP Committee. The data and analysis contained in these documents are subject to revision and are not final. These materials report the results of research and analysis undertaken by Census Bureau staff. They have undergone a more limited review than official Census Bureau publications. Research results and conclusions expressed are those of the authors and do not necessarily indicate concurrence by the Census Bureau.

ESCAP MEETING NO. 49 - 04/12/01

MINUTES

**Minutes of the Executive Steering Committee on
Accuracy and Coverage Evaluation (A.C.E.) Policy (ESCAP) Meeting # 49**

April 12, 2001

Prepared by: Nick Birnbaum

The forty-ninth meeting of the Executive Steering Committee on Accuracy and Coverage Evaluation Policy was held on April 12, 2001 at 1:30 pm. The agenda for the meeting was to discuss the Committee's data analysis plan for reaching a recommendation on whether or not to adjust the Census 2000 counts for the purpose of developing the sample data, the development of intercensal estimates, and survey controls. Included in this discussion was an examination of the planned Demographic Analysis (DA) and Population Estimates research. There was also a discussion regarding the appropriate levels of geography for analysis.

Committee Attendees:

Paula Schneider
Nancy Potok
Cynthia Clark
John Thompson
Jay Waite
Nancy Gordon
Howard Hogan
Carol Van Horn
Bob Fay

Deputy Director/Acting Director:
William Barron

Other Attendees:

Raj Singh
Signe Wetrogan (second half of meeting only)
Gregg Robinson (second half of meeting only)
Deborah Fenstermaker
Carolee Bush
Maria Urrutia

Fay Nash
Rita Petroni
Susanne Bean (first half of meeting only)
David Raglin (first half of meeting only)
Nick Birnbaum
Elizabeth Krejsa

I. ESCAP Data Analysis Plan

John Thompson described the evaluations that are currently being carried out or will begin shortly that could be accelerated to provide information that would be useful in addressing the issues that the ESCAP has identified as needing resolution to determine whether the adjusted data should be used for other purposes. John discussed some of the kinds of information that could be gleaned from the evaluations. In reviewing this information, some evaluation areas are no longer being considered for this accelerated work as the information they would provide is only tangentially related to the issues of concern. John is having a document prepared that will summarize the specific areas of evaluation that ESCAP will focus on and how the information will be synthesized to address the issues needing resolution.

The evaluation areas that ESCAP will focus on include: 1) Demographic Analysis (particularly the International Migration component and the overall robustness of the DA estimates); 2) Balancing Error; 3) A.C.E. Measures of Erroneous Enumeration; 4) Total Error Model; 5) Correlation Bias; 6) A.C.E. Missing Data; 7) Late Census 2000 Additions; 8) Conditioning; 9) Duplication Not Measured in the A.C.E.; 10) Census Person Imputations; and 11) Synthetic Error (using both artificial populations and direct estimates).

Among the points that surfaced during the discussion were the following:

- To examine the issue of balancing error, we will follow up selected P-sample and E-sample housing units to determine correct geographic locations. Also, additional field work will be done for certain types of P-sample cases, including P-sample persons matched in surrounding blocks.
- The A.C.E. error components (using the actual error parameters, as measured by the 2000 evaluations) that will be measured and input into the revised Total Error Model are 1) P-sample matching error; 2) P-sample data collection error; 3) P-sample discrepancy error; and 4) E-sample processing and data collection errors.

The error rates for these components will be obtained from the *Matching Error Study* and the *Analysis of Measurement Error Study*. The *Matching Error Study* will involve a clerical rematching of a subsample of the A.C.E. clusters by expert matchers to determine the best possible match code and compare these to the production codes. The *Analysis of Measurement Error Study* will involve re-interviewing in a subsample of the A.C.E. clusters and using that information to rematch the Census and A.C.E. persons in those households. The results of this study will indicate the accuracy of the data (showing E-sample and P-sample data collection error) flowing into the person matching process.

Additionally, the timing of the Census 2000 values (i.e., when the data will be available) for the total error model components was discussed.

- Balancing error continues to be a source of significant concern with regard to the adjusted data, and the ESCAP will be informed by the work described above.
- Because of their particular importance, the Committee will attempt to accelerate the work in the following areas: re-match, re-interview, balancing error, DA, and synthetic error.

II. Demographic Analysis and Population Estimates Research Project

Nancy Gordon discussed the planned research regarding the reliability of Population Division's demographic analysis and population estimates methodology and the underlying components of population change to help shed light on the inconsistencies between the A.C.E. estimates and the results from DA for Census 2000. It is believed that the research results will provide valuable input to the Committee's decision on the use of the adjusted population figures for purposes beyond redistricting.

During the discussion, it was noted that the Census 2000 long-form data are now available for analysis and these data will be an important tool for evaluating the international migration component of the DA estimates. Additionally, the Census 2000 supplementary survey data will also be available shortly for analysis.

There was some discussion about whether results from the DA and Population Estimates research would be provided to the Committee on a flow basis or all at once, when the entirety of the research had been completed. It was agreed that, to the extent practicable, the research results would be provided to the Committee on a flow basis.

With regard to survey controls, it was noted that the July release of the American Community Survey data would not be controlled to the adjusted data as the Committee would not have completed its analyses by then, but if the Committee does ultimately recommend that the adjusted data be used for survey controls, then the Bureau could retroactively control the July release to the adjusted data.

III. Levels of Geography Relevant to the ESCAP's Analyses

For the intercensal estimates component of the decision, the Committee briefly discussed at what levels of geography the loss functions should be performed. Similar discussion regarding geographic levels focused on the possible use of the adjusted data for survey controls. The ESCAP also discussed the extent to which counts (numeric accuracy) versus shares

(distributive accuracy) should be emphasized in the intercensal estimates analysis. Finally, the Committee considered the timing requirements for making these determinations.

The meeting closed with a discussion of the Committee's plans to share information regarding its decision-making process with stakeholders and other interested parties.

IV. Next Meeting

The next meeting is scheduled for mid-June 2001. By that point in time, the Committee expects that there will be some data and analyses available for consideration for some of the areas of inquiry.